

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/16/2011 has been entered.
2. Claims 1, 2, 4-6, 8-12 and 14-19 are currently pending. Claims 10-12 and 14-16 are currently withdrawn.
3. The 112, second paragraph rejections of claims 1-9 and 17-19 have been withdrawn, because claim 1 has been amended.
4. The 112, first paragraph rejections of claims 1-9 and 17-19 have been withdrawn, because claim 1 has been amended.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 is written as an incomplete sentence. The claim reads, “the method according to claim 1, wherein the liquid comprising the silicone compound”. It is noted that claim 9 read as, “the method according to claim 1, wherein the liquid comprising the silicone compound is a developer, “based on the instant disclosure and as previously claimed. For purposes of examination, the examiner will interpret the claim as “the liquid comprising the silicone compound is a developer.” As previously claimed. Appropriate correction is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained through the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1, 2, 4, 6, 8, 9 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuji (US 2002/0182543 A1) in view of Suzuki et al. (US 5,532,116).

Fuji discloses a method (abstract) for producing a water-developable photopolymer plate for letterpress printing plate [0001] comprising an exposure step [0009 and 0076], a development step [0012, 0046-0047 and 0060-0062] and post-exposure step [0072 and 0081]. The plate comprises a photopolymer (photosensitive resin A made by Asahi Kasei Corp F-320; [0076 and 0080]). The method further comprises a contact step during or after the exposure step and irradiation step with actinic light during or after the contact step [0009, 0018 and examples 1 and 2].

Fuji does not explicitly disclose that the photopolymer comprises a binder polymer comprising a mixture of a polar group-containing polymer and a hydrophobic polymer, an ethylenically unsaturated compound; and a photopolymerization initiator as recited in claim 2. However, Fuji discloses that the photopolymer is from the photosensitive resin composition F-320 made by Asahi Kasei Corp [0076, 0080 and 0085], which includes a binder polymer, an initiator and an ethylenically unsaturated compound. Also, It is noted that instant disclosure recites that the photopolymer plate is made from the photosensitive resin composition F-320 made by Asahi Kasei Corp in paragraph [0114 in the ppgub or example 18], which contains the photopolymer. Since the photosensitive resin compositions are the same for the instant disclosure and Fuji, then the photopolymer of Fuji comprises a binder polymer comprising a mixture of a polar group-containing polymer and a hydrophobic polymer, an ethylenically unsaturated compound as recited in instant claim 2.

Fuji does not explicitly disclose that the contact step brings the photopolymer plate into contact with a liquid comprising a silicone compound with a reactive functional

group. Fuji discloses the contact step includes spraying the developing liquid on the photopolymer plate [0009 and examples]. The developing liquid containing a silicone mixture [0076] or an aqueous developing liquid comprises of water, surfactant, organic carbonyl compound, hydrogen abstracting agent and other components that do not impair the effect of the invention [0045-0059]. The purpose of Fuji is the development of a method for developing a photosensitive letterpress plate that reduces the cost to treat worn out developing liquid and to give sharp printing results [0008-0009].

However, Suzuki et al. disclose an aqueous alkaline developing solution which is used in employing an image forming process in the field of printing arts (col. 1, lines 1-10). The developing solution is a liquid comprising a silicone compound modified with one or more reactive functional groups (an alkoxy group; col. 18, lines 1-26). The developing solution explicitly discloses using a polydialkoxylsiloxane as anti-foaming agent. Polydialkoxylsiloxane is a silicone compound comprising one or more alkoxy groups, which meets the limitation of the instant claim 1. It is noted that contact step can be carried out during development step, which means the steps are combined as one step as recited in the instant claims of the present application. Therefore, Suzuki et al. developing solution is also contacting the plate in the same step. See examples. Examiner notes that Suzuki et al. and Fuji are analogous art in printing plate technology.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include/modify the developing solution of Fuji to comprise a silicone compound modified with one or more reactive functional groups (i.e. Polydialkoxysiloxane) as disclosed by Suzuki et al. in view aiding in the increasing the

number of light-sensitive image forming materials and reducing the effect of bubbles in the developer (col. 17, line 45- col. 18, line 26).

10. Claims 1, 4, 6, 8, 9, 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida (US 6,403,284 B1) in view of Suzuki et al. (US 5,532,116) .

Yoshida discloses a method (process) for producing a water-developable photopolymer plate for letterpress printing plate (abstract and col. 1, lines 13-20), wherein the plate is made from a photopolymer (photosensitive prepolymer resin; col. 5, lines 1-23 and examples), comprising an exposure step (col. 10, lines 43-67), a development step (col. 11, lines 37-67) and a post-exposure step (col. 12, lines 1-31). The method further comprises a contact step after the exposure step and during the developing step (developer comprising the silicone compound (col. 17, lines 42-59) and a step of irradiation with actinic light (ultraviolet fluorescent lighting; col. 17, lines 60-67) after the contact step (developing step).

Yoshida does not explicitly disclose that the contact step brings the photopolymer plate into contact with a liquid comprising a silicone compound with a reactive functional group. Fuji discloses a step of development including a liquid comprising a defoaming (anti-foaming) silicone agent (SH-4; col. 17, lines 42-60). It is noted that the development step and contact step are combined as one step based on the instant claims. However, Suzuki et al. disclose an aqueous alkaline developing solution which is used in employing an image forming process in the field of printing arts (col. 1, lines 1-10). The developing solution is a liquid comprising a silicone compound modified with one or more reactive functional groups (an alkoxyl group; col. 18, lines 1-26). The

developing solution explicitly discloses using a polydialkoxylsiloxane as anti-foaming agent. Polydialkoxylsiloxane is a silicone compound comprising one or more alkoxy groups, which meets the limitation of the instant claims. It is noted that contact step can be carried out during development step, which means the steps are combined as one step as recited in the instant claims. Therefore, Suzuki et al. developing solution is also contacting the plate in the same step. See examples. Examiner notes that Suzuki et al. and Yoshida are analogous art in printing plate technology.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include/modify the developing solution of Yoshida to comprise a silicone compound modified with one or more reactive functional groups (i.e. Polydialkoxysiloxane) as disclosed by Suzuki et al. in view aiding in the increasing the number of light-sensitive image forming materials and reducing the effect of bubbles in the developer (col. 17, line 45- col. 18, line 26).

Response to Arguments

11. Applicant's arguments with respect to claims 1, 2, 4-6, 8-12 and 14-19 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

12. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHANCEITY ROBINSON whose telephone number is (571)270-3786. The examiner can normally be reached on Monday to Friday (with every other Friday off): 9:00 -6:00 pm eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chanceity N Robinson/
Examiner, Art Unit 1722

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